

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103

Revised August 1, 2011

RECEIVED

OIL CONSERVATION DIVISION

FEB 13 2012

1220 South St. Francis Dr.

Santa Fe, NM 87505

HOBBSOCD

WELL API NO.

30- 025-08489

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

-

7. Lease Name or Unit Agreement Name

Bell Lake Unit

8. Well Number

2

9. OGRID Number

012361

10. Pool name or Wildcat

Bell Lake Delaware

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other SWD

2. Name of Operator

Kaiser-Francis Oil Company

3. Address of Operator

P. O. Box 21468, Tulsa, OK 74121-1468

4. Well Location

Unit Letter N : 660 feet from the South line and 3300 feet from the East line
Section 30 Township 23S Range 34E NMPM Lea County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

3642 DF

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please see attached P&A procedure + current & final wellbore diagrams.

Operations to begin 2/2012. * See attached memo from engineer.

HOBBSOCD

FEB 09 2012

RECEIVED

Spud Date:

4/14/54

Rig Release Date:

10/4/54

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

Charlotte Van Valkenburg

TITLE Technical Coordinator

DATE 2/6/12

Type or print name Charlotte Van Valkenburg E-mail address: Charlottv@kfoc.net

PHONE: 918-491-4314

For State Use Only

APPROVED BY:

E. B. B. B.

TITLE

State Engineer

DATE

2-13-2012

Conditions of Approval (if any):

Kaiser-Francis Oil Company

Plugging and Abandonment Procedure

Bell Lake Unit #2 SWD

660' FSL & 3300 FEL, Section 30, T23S, R34E

Lea County, New Mexico

API # 30-025-08489

WELL DATA

Elevation: GL Elev. = 3642' KB Elev. = 3517'

Surface Casing: 13-3/8" 48# H-40?? @ 1,269', cemented w/ 840 sx (circ)

Inter. Casing: 9 5/8" 40# N-80 @ 6,080', cemented w/ 3150 sx, (circ)

Production Csg: 7" 26-32# N-80 @ 5,650'-12,469', cemented w/ 1360 sx.
TOC @ 7500'

TD: 13,866'

PBTD: 8,575' (top of cement plug)

Current Perfs: Delaware (disposal): 5185' – 7,070' OA

Formation Tops (MD): Delaware 5,122', Castille 4,038', Anhydrite 1,251'.
The Yates, Glorietta & Abo are not present in this wellbore.

Tubular Data

OD	Weight	Grade	Depth	Conn	ID	Drift	Capacity (bbl/ft)	Burst (80%)	Coll. (80%)	Jt Str. (80%)
9 5/8"	40#	N-80	0-6080'	LTC	8.835	8.679	0.075825	4600	2472	
7"	26#	N-80	0-12,469'	LTC	6.276	6.151	0.038262	5792	4328	
7"	29#	N-80	0-12,469'	LTC	6.184	6.059	0.037148	6528	5616	
7"	32#	N-80	0-12,469'	LTC	6.094	5.969	0.036075	7248	6880	
2 7/8"	6.5#	J-55	0-5060	8RD	2.441	2.347	0.005788	5808	6144	79728

Annulus	Capacity (bbl/ft)
2 7/8" X 9 5/8"	0.067796
2 7/8" X 7" 29#	0.029119

Tubing string: 155 joints 2 7/8" 6.5#, J-55 tubing w/ TK-70 coating
2.25" ID plastic-coated SN
2 7/8" X 9 5/8" AS-1X nickel-coated packer @ 5,060' (set
w/ 14K compression)

P&A PROCEDURE

- 1) Coordinate all plugging activities w/ State of New Mexico compliance officer Mark Whitaker. OCD Hobbs office # 575-393-6161. Notify BLM Hobbs office 575-393-3612 at least 48 hours in advance.

Note: Notify all wellsite personnel: Do not throw any trash in wellbore!

- 2) **This well has the potential to produce H2S.** If necessary, rig up H2S safety equipment. Ensure all crews have monitors and are H2S trained. Have safety man to monitor conditions, windsocks and a trailer w/ air packs on location.
- 3) Prior to moving in rig, check and report tubing pressure. Attempt to blow well down to tanks for a day or two. Report results. Dig down around wellhead so that all valves are accessible.

Note: If pressure will not bleed off, notify Tulsa to discuss required kill fluid.

- 4) MIRU WOR and pump truck. Kill well as needed w/ brine. ND wellhead. NU BOP w/ 2 7/8" pipe rams.
- 5) Release 9 5/8" AS-1X packer, allow well to equalize and TOOHLaying down plastic-coated tubing. LD 9 5/8" nickel-coated packer. Send packer in to shop and haul off tubing.

Note: put thread protectors on plastic-coated tubing and send in.

- 6) Take delivery of 5300' of 2 7/8", 6.5#, J-55 tubing. Strap and tally pipe.
- 7) P/U and TIH w/ w/ 9 5/8" squeeze packer to +/- 5050' (subject to NM compliance officer request). Set packer, load and test back side to 500#. If backside doesn't test, P/U and re-set packer as necessary until backside holds. Report results and packer depth to Tulsa and discuss point-forward operations.

Note: Probable ID restrictions in 9 5/8" and 7" casing strings. 8 5/8" bit made it to 5238' on 12/6/07. 6" bit made it to 6022'.

Note: 9 5/8" casing wasn't testing w/ packer set at 5,060'.⁷

- 8) With ~500# held on 2 7/8" X 9 5/8" annulus, establish injection rate into perforations below packer w/ fresh water. Report rate, pressures and volumes pumped.

- 9) MIRU cementers. RU and test lines. Mix cement. Pressure backside to 500#. Pump FW spacer and pump 275 sx 1.33 yield Class "C" cement down tubing. Stage/hesitate last 50 sx; attempting to squeeze off perforations.

Note: use approved H2S-resistant cement for all plugs.

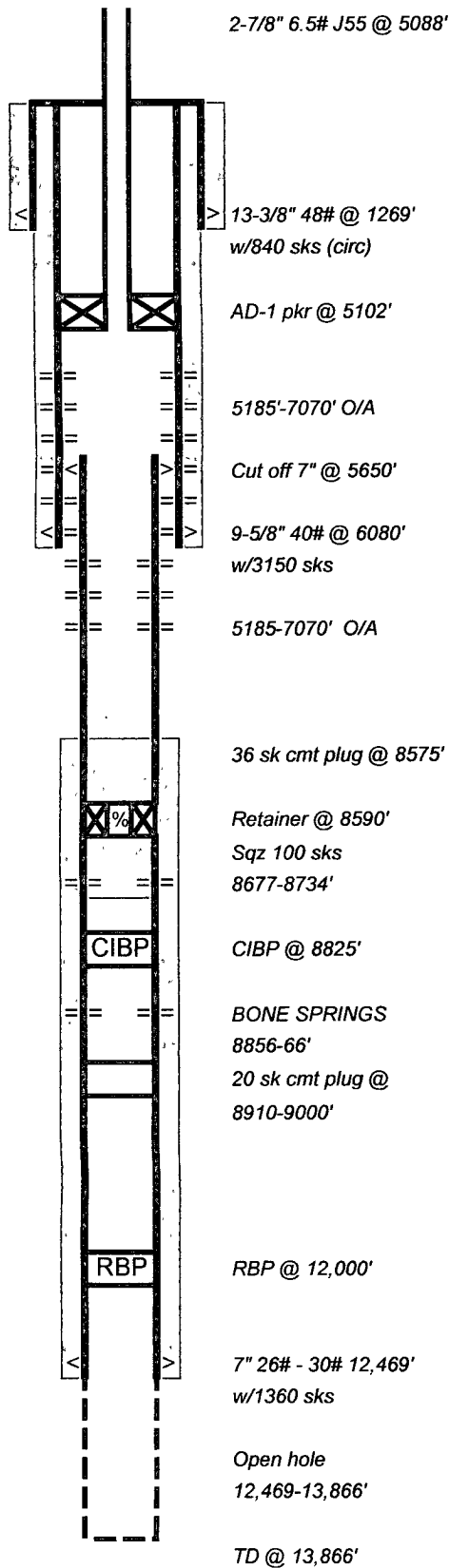
- 10) PU w/ tubing and reverse string clean w/ a minimum of two tubing volumes of fresh water. Release packer and TOOH. LD packer.
- 11) TIH w/ tubing open-ended. Tag cement plug and report depth. If necessary, spot additional cement.
- 12) Displace wellbore to 9.5# brine-based approved plugging mud. Use 25sx gel / 100 bbls as per compliance officer's request.
- 13) **Castille Plug:** POOH w/ tubing to 4,038' and spot 35 sx 1.33 yield Class "C" + 2% CaCl₂ cement (100' plug) f/ 4,038 – 3,938'. —
- 14) P/U out of cement and reverse string clean w/ a minimum of two tubing volumes of plugging mud. RBIH to tag plug if required. *WOC & TAG*
- 15) **Anhydrite Plug:** POOH w/ tubing to 1,251' and spot 35 sx 1.33 yield Class "C" + 2% CaCl₂ cement (100' plug) f/ 1,251 – 1,151'.
- 16) P/U out of cement and reverse string clean w/ a minimum of two tubing volumes of plugging mud. RBIH to tag plug if required. *WOC & TAG*
- 17) **Surface Plug:** POOH w/ tubing-laying down to 103'. Spot 35 sx Class "C" + 2% CaCl₂, 1.33 yield surface plug f/ 103' to 3'. RDMO cementers.

Note: keep hole full while coming out with tubing.

- 18) ND BOP. Cut off wellhead and mark location w/ 4' marker as per NM requirements. RDMO WOR and release all rentals.
- 19) Dig up rig anchors and remediate location.

WELL DIAGRAM - 11/27/07

BELL LAKE UNIT NO. 2 SWD
660' FSL & 3300' FEL
SECTION 30-23S-34E
LEA COUNTY, MEXICO



SPUD: 4/14/54 GL: 3642' RTD: 13,044'

COMPLETION:

5" Liner 12,319'-13,034' w/100 sxs
PERF: 12,976-994' (72); 12,936-42 (24); 12,948-56 (24'); 12,960-66' (24)
swab dry, CIBP 12,934'
PERF: 12,906-27 (84), Acid w/500 gal, 254 MCFD, BP @ 12,890'
PERF: 12,816-27 (44); 12,842-70 (112)
BP 12,780'
PERF: 12,714-26 (48)
BP 12,690'
PERF: 12,635-65 (120) - 60 BC in 10 hrs, 2337 MCFD rate
COMP 10/30/54 - SI gas well

WO: 1/62: CO & mill out 5" liner deepen to 13,866', ran DST, TA well 1/19/62

WO: 4/63: PB & Recomplete in Bone Springs

Set 20 sx cmt plug 8910-9000'
PERF: BONE SPRINGS 8856-66'
A/500 gal MCA - non commercial
Set CIBP @ 8825'
PERF: BONE SPRINGS 8677-92'; 8700-8; 8728-34' (25 spf)
A/2000 gal acid - non commercial
Set ret 8590', sqz w/100 sxs
TA well

WO: 7/72: Convert to SWD

Spot 36 sx plug @ 8575', cut off 7" @ 5650'
PERF: 7060-70', 7000-10'; 6910-20'; 6945-6505'; 6410-20'; 6270-80'; 6235-45';
6155-65'; 5585-95'; 5515-25'; 5470-80'; 5410-20'; 5365-75'; 5310-20'; 5250-60';
5185-95' (5 shots/10')
A/6165-70' w/5000 gal 20% HCL
A/5585-98/15-25/5420-80/10-20/5365-75'/5310-20' each w/500 gal 20% NEFE
A/5250-5185/w/1000 gal 20% NEFE
set pkr @ 5102'

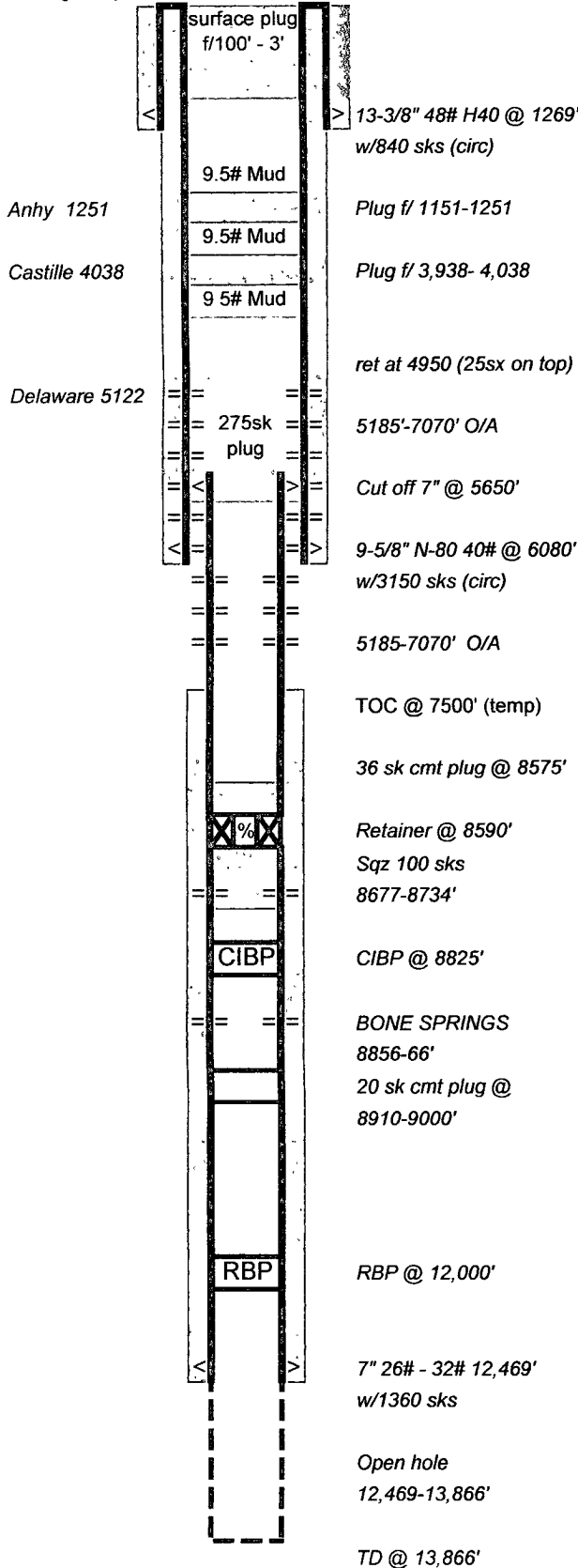
WS: 3/5/91: MIT test to 520#

5/05: KFOC took over operations from Conoco.
6/05 Acidize w/ 1000 gal 20% HCl. Replace leaking wellhead flange.
7/05: Acidize w/ 2000 gals 20% HCl.
10/05: Acidize w/ 2000 gals 20% HCl.

6/06: Acidize w/ 2000 gals 20% HCl.
4/07: Acidize w/ 2000 gals 20% HCl.
6/07: Inj press 1250, flow back 130 bbls, tag blockage in tbg
WO: 11/27/07: Repl tbg, re-perf, acidize

WELL DIAGRAM - 1/26/12
 BELL LAKE UNIT NO. 2 SWD
 660' FSL & 3300' FEL
 SECTION 30-23S-34E
 LEA COUNTY, MEXICO

Geologic Tops



SPUD: 4/14/54 GL: 3642' KB: 3517' RTD: 13,044'

COMPLETION:

5" Liner 12,319'-13,034' w/100 sxs
 PERF: 12,976-994' (72); 12,936-42 (24); 12,948-56 (24'); 12,960-66' (24)
 swab dry, CIBP 12,934'
 PERF: 12,906-27 (84), Acid w/500 gal, 254 MCFD, BP @ 12,890'
 PERF: 12,816-27 (44); 12,842-70 (112)
 BP 12,780'
 PERF: 12,714-26 (48)
 BP 12,690'
 PERF: 12,635-65 (120) - 60 BC in 10 hrs, 2337 MCFD rate
 COMP 10/30/54 - SI gas well

WO: 1/62: CO & mill out 5" liner deepen to 13,866', ran DST, TA well 1/19/62

WO: 4/63: PB & Recomplete in Bone Springs

Set 20 sx cmt plug 8910-9000'
 PERF: BONE SPRINGS 8856-66'
 A/500 gal MCA - non commercial
 Set CIBP @ 8825'
 PERF: BONE SPRINGS 8677-92'; 8700-8; 8728-34' (25 spf)
 A/2000 gal acid - non commercial
 Set ret 8590', sqz w/100 sxs
 TA well

WO: 7/72: Convert to SWD

Spot 36 sx plug @ 8575', cut off 7" @ 5650'
 PERF: 7060-70', 7000-10'; 6910-20'; 6945-6505'; 6410-20'; 6270-80'; 6235-45';
 6155-65'; 5585-95'; 5515-25'; 5470-80'; 5410-20'; 5365-75'; 5310-20'; 5250-60';
 5185-95' (5 shots/10')
 A/6165-70' w/5000 gal 20% HCL
 A/5585-98/15-25/5420-80/10-20/5365-75'/5310-20' each w/500 gal 20% NEFE
 A/5250-5185/w/1000 gal 20% NEFE
 set pkr @ 5102'

WS: 3/5/91: MIT test to 520#

5/05: KFOC took over operations from Conoco.
 6/05 Acidize w/ 1000 gal 20% Hcl. Replace leaking wellhead flange.
 7/05: Acidize w/ 2000 gals 20% HCl.
 10/05: Acidize w/ 2000 gals 20% HCl.
 6/06: Acidize w/ 2000 gals 20% HCl.
 4/07: Acidize w/ 2000 gals 20% HCl.

6/07: Inj press 1250, flow back 130 bbls, tag blockage in tbg

WO: 11-12/07: C/O to 6,022' w/ 6" mill. Repl tbg w/ TK-70 plastic-lined.

WO: 5/09: Failed MIT. Pulled packer up to 5,060' re-set w/ 14K and passed MIT.

11/16/11: Failed MIT.

February 1, 2012

To: Mr. Whitaker
Compliance Officer
New Mexico Energy, Minerals and Natural Resources
Oil and Gas Division

Regarding: Bell Lake #2 SWD MIT compliance

Mr. Whitaker:

In response to your letter dated 11/16/2011, we are planning to plug and abandon the Bell Lake Unit #2 (API 30-025-08489). We will attempt to locate a plugging contractor as soon as we have a plugging procedure approved. Please find the attached form C-103, proposed procedure and well schematics and let us know if they are acceptable. If they are, we'll start work on this project. In your review of the proposed procedure, please consider the fact that we have made significant attempts to clean out the 7" casing but have only been able to get down to 6,022'. Also, due to current shortages of people and equipment in this area, getting the plugging work accomplished by the imposed deadline of 2/18/2012 may be difficult.

Should you have any questions or recommendations regarding the proposed work, please contact me at 918-491-4350

Sincerely,
KAISER-FRANCIS OIL COMPANY



David B. Zerger
Petroleum Engineer